

Amendments to the Claim:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Original) A purified retroviral envelope polypeptide, capable of mediating infection of a cell by use of the polytropic/xenotropic receptor encoded by the Rmc1 locus of the NIH Swiss inbred NFS/N mouse for entry, and unable of mediating infection of a cell by use of a human polytropic/xenotropic receptor encoded by the human RMC1 locus.

2-3. (Cancelled)

4. (Previously presented) A purified retroviral envelope polypeptide comprising an amino acid sequence which is at least 94% identical to the amino acid sequence shown in SEQ ID NO: 2, or a fragment of said amino acid sequence that is at least 94% identical to the sequence shown in SEQ ID NO: 2, wherein said polypeptide is

a) capable of mediating infection of a cell by use of the polytropic/xenotropic receptor encoded by the Rmc1 locus of the NIH Swiss inbred NFS/N mouse for entry and unable of mediating infection of a cell by use of a human polytropic/xenotropic receptor encoded by the human RMC1 locus or

b) capable of mediating infection of a human cell and wherein said polypeptide includes at least one substitution in the VR3 region.

5. (Cancelled)

6. (Previously presented) A purified retroviral envelope polypeptide according to claim 4, wherein said mutation is at position 212 in SEQ ID NO: 2.

7. (Previously presented) A purified retroviral envelope polypeptide according to claim 4, wherein said at least one substitution alters the host tropism of a virus or an infectious

particle comprising said polypeptide.

8. (Previously presented) A purified retroviral envelope polypeptide according to claim 4, wherein said purified polypeptide is a murine retroviral envelope polypeptide capable of mediating infection of a human cell.

9. (Previously presented) A purified retroviral envelope polypeptide according to claim 4, wherein said mutation at position 212 in SEQ ID: 2 results in a methionine.

10. (Previously presented) A purified retroviral envelope polypeptide according to claim 4 capable of mediating a higher infectivity in human cells than MCF-247, MCF-13 and X-MLV (NZB) viruses.

11. (Previously presented) A purified retroviral envelope polypeptide according to claim 4, further comprising an inserted non-viral sequence capable of redirecting the target cell specificity, by the resultant chimeric envelope.

12. (Original) A purified retroviral envelope polypeptide according to claim 11, wherein the chimeric envelope further contains secondary mutations, enabling activation of the fusiogenic properties of said chimeric envelope, by binding to the receptor target.

13. (Previously presented) A purified retroviral envelope polypeptide according to claim 11, wherein said inserted sequence is a single chain antibody.

14. (Previously presented) A purified retroviral envelope polypeptide according to claim 4, further comprising a chemical modification of said envelope.

15. (Original) A purified retroviral envelope polypeptide according to claim 14, wherein said chemical modification enhances and/or alters the host tropism.

16. (Previously presented) A recombinant mammalian cell displaying an envelope polypeptide according to claim 4.

17. (Previously presented) An isolated nucleic acid sequence encoding any of the envelope polypeptides according to claim 4.

18. (Currently Amended) An isolated nucleic acid sequence

as shown in SEQ ID NO: 1.

19. (Previously presented) A vector comprising a purified envelope polypeptide according to claim 4, wherein said vector is a recombinant mammalian expression vector or a retroviral expression vector.

20. (Cancelled)

21. (Previously presented) A replication competent retrovirus, comprising a purified envelope polypeptide according to claim 4, wherein said polypeptide is capable of mediating infection of a human cell and wherein said polypeptide includes at least one substitution in the VR3 region.

22. (Previously presented) A replication competent retrovirus comprising an envelope polypeptide according to claim 4 and further comprising a heterologous translation cassette.

23. (Cancelled)

24. (Previously presented) A retrovirus according to claim 22, wherein said heterologous translation cassette consists of an IRES-gene element.

25-26. (Cancelled)

27. (Previously presented) A vector according to claim 19, further comprising at least one heterologous gene to be expressed.

28. (Currently Amended) A vector according to claim 26 27, wherein expression of the envelope is directed by an IRES-element.

29. (Previously presented) A packaging cell construct comprising a recombinant mammalian expression vector comprising a nucleic acid coding for a purified envelope polypeptide according to claim 4, and a non-viral or viral promoter and poly-adenylation signals.

30. (Currently amended) A method for for the generation of a packaging cell said method comprising use of a vector according to claim 19.

31. (Previously presented) A method for expression of a polypeptide in a cell constitutively expressing the gag/pol genes

of simple retroviruses said method comprising use of a vector according to claim 19.

32. (Previously presented) A method for the preparation of a composition for the modification of a cell said method comprising use of a packaging cell according to claim 29.

33. (Previously presented) A method for the preparation of a composition for the modification of a cell said method comprising use of a virus according to claim 22.

34. (Cancelled)

35. (Previously presented) Method according to claim 39, wherein said rodent constitutively express the gag/pol genes of simple retroviruses.

36. (Previously presented) Method according to claim 39, wherein said rodent express the gag/pol genes of simple retroviruses in a tissue specific manner.

37. (Previously presented) Method according to claim 39, wherein said rodent expression of the gag/pol genes of simple retroviruses is developmentally regulated.

38. (Cancelled)

39. (Previously presented) A method for gene discovery comprising

a) providing

- i) a recombinant mammalian expression vector; or
- ii) a replication competent retrovirus; or
- iii) a retroviral expression vector

wherein said vector or virus comprises a purified envelope polypeptide according to claim 4;

- b) infecting a new-born rodent with said virus or vector
- c) inducing a tumour by means of said virus or vector
- d) isolating said tumour in said rodent
- e) identifying a gene involved in the oncogenesis by cloning the integration site of said virus or vector in said tumour.

40. (Original) A method according to claim 39 for gene discovery of a cancer related gene.

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41. (Cancelled)